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| APPLICATION NO. | F | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|----------------|-------------|----------------------|---------------------|------------------|
| 10/049,403 | 403 03/26/2002 | | Richard Kopp | Mo6934/LeA 33,548 | 1142 |
| 157 | 7590 | 04/13/2004 | | EXAMINER | |
| BAYER P | | RS LLC | TENTONI, LEO B | | |
| PITTSBURGH, PA 15205 | | | | ART UNIT | PAPER NUMBER |
| | | | | 1732 | |

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | | | |
|---|--|---|--|---------------------|--|--|--|--|--|
| | | 10/049,403 | KOPP ET AL. | | | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | | | |
| | | Leo B. Tentoni | 1732 | | | | | | |
| Period fo | The MAILING DATE of this communic or Reply | cation appears on the cover s | heet with the correspondence a | ddress | | | | | |
| THE - Exte after - If the - If NC - Failt Any | ORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIC nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communic period for reply specified above is less than thirty (30) period for reply is specified above, the maximum stature to reply within the set or extended period for reply wreply received by the Office later than three months afted patent term adjustment. See 37 CFR 1.704(b). | CATION. f 37 CFR 1.136(a). In no event, howeven incetion. days, a reply within the statutory minimutory period will apply and will expire SI ill, by statute, cause the application to be | er, may a reply be timely filed num of thirty (30) days will be considered tim X (6) MONTHS from the mailing date of this become ABANDONED (35 U.S.C. § 133). | | | | | | |
| Status | | | | | | | | | |
| 1)[] | Responsive to communication(s) filed | l òn | | | | | | | |
| 2a) <u></u> | This action is FINAL . 2I | o) This action is non-final | | | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposit | ion of Claims | | | | | | | | |
| 5) | Claim(s) 10-18 is/are pending in the a 4a) Of the above claim(s) is/are Claim(s) is/are allowed. Claim(s) 10-18 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction | e withdrawn from considerat | | | | | | | |
| Applicat | ion Papers | | | | | | | | |
| 9)⊠ | The specification is objected to by the | Examiner. | | | | | | | |
| 10) | The drawing(s) filed on is/are: | a)□ accepted or b)□ obje | cted to by the Examiner. | | | | | | |
| | Applicant may not request that any object | | • | | | | | | |
| 11) | Replacement drawing sheet(s) including the oath or declaration is objected to | • | • , | ` ' | | | | | |
| Priority (| ınder 35 U.S.C. § 119 | | | | | | | | |
| a) | Acknowledgment is made of a claim for All b) Some * c) None of: 1. Certified copies of the priority do None of: 2. Certified copies of the priority do None of: 3. Copies of the certified copies of application from the Internation of See the attached detailed Office action | ocuments have been receiv ocuments have been receiv f the priority documents hav al Bureau (PCT Rule 17.2(a | red. red in Application No re been received in this Nationa n)). | ıl Stage | | | | | |
| Attachmen | , , | | | | | | | | |
| | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT | | terview Summary (PTO-413) aper No(s)/Mail Date | | | | | | |
| 3) Infor | mation Disclosure Statement(s) (PTO-1449 or P r No(s)/Mail Date | TO/SB/08) 5) 🔲 N | otice of Informal Patent Application (PT | [·] O-152) | | | | | |

Application/Control Number: 10/049,403 Page 2

Art Unit: 1732

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1732, Examiner Leo Tentoni.

Priority

Receipt is acknowledged of papers submitted under 35
 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

- 3. The abstract of the disclosure is objected to because in line 2, ``comprising'' should be - including - (legal or claim-type phraseology should not be used in the abstract).

 Correction is required. See MPEP § 608.01(b).
- 4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 10-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fink et al (U.S. Patent 5,510,066).

Fink et al (see the entire document, in particular, col. 5, lines 22-30; col. 5, line 59 to col. 6, line 17; col. 8, lines 37-67; col. 11, line 55 to col. 12, line 8; col. 18, line 56 to col. 19, line 34) teach a process of making a three-dimensional or flat structure as set forth in the instant claims, including combining jetted material in the form of droplets, wherein one component is a polyisocyanate and the other component reacts with the polyisocyanate. Regarding claims 15 and 16, the droplets are combined on the support element to form a first layer, and the droplets are combined above the support element to form the second (and subsequent) layer(s). Regarding claim 18, producing the structure in a dry (or fairly dry) environment is inherent in Fink et al principally in order to prevent undesired reactions between the components and atmospheric water vapor.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fink et al (U.S. Patent 5,510,066) as applied to claims 10-16 and 18 above, and further in view of Weller (GB 1,103,202).

Weller (see the entire document, in particular, page 2, lines 17-30) teaches reacting polyisocyanate with polyamine and it would have been obvious to one of ordinary skill in the art at

the time the invention was made in the process of Fink et al to use polyamine (instead of polyol) to react with polyisocyanate principally in order to make polyurethane material having desired characteristics and properties.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,149,548 was cited in the corresponding international search report (as were the cited references above).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yeo YS. Sentone Leo B. Tentoni Primary Examiner Art Unit 1732

lbt